

A B S T R A C T

Device enabling different spreading factors whilst preserving a common scrambling code, in particular for transmission in a code division multiple access cellular mobile radio system, the device including, on transmission, for spreading K incoming sequences by means of K respective spreading codes of respective length Q_k ($k=1, \dots, K$) which is a sub-multiple of a maximum length Q_{MAX} , and scrambling the spread sequences obtained in this way:

- means for grouping the various data symbols of the kth incoming sequence ($k=1, \dots, K$) into different blocks of Q_{MAX}/Q_k symbols,

- means for spreading the blocks from the kth incoming sequence ($k=1, \dots, K$) by means of the corresponding code of length Q_k to obtain a spread sequence including different spread blocks of length Q_{MAX} ,

- means for scrambling each of the K spread sequences obtained in this way using a scrambling code of length Q_{MAX} .